IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Lisette Cooper et al.	Art Unit	: 3628
Serial No.	: 09/836,484	Examiner	: Siegfried Chencinski
Filed	: April 17, 2001	Conf. No.	: 8521
Title	: VISUALIZATION OF ASSET INFORMATION		

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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Claims 14-18, 22, 23, and 28 have been rejected under 35 U.S.C. § 101 as not directed to an area of patentable subject matter, § 112, first paragraph, as "not supported by either a concrete and tangible asserted utility or a well established utility," § 112, first paragraph, as failing to comply with the enablement requirement, § 112, second paragraph, as omitting essential elements, and § 103(a) as being "disclosed" in Gatto (U.S. Pre-Grant Publication 2003/0065601A1) in view of allegedly applicant-disclosed prior art (AAPA), Official Notice, Microsoft Excel® 5 Training Book (Excel), and Jones et al. (U.S. Pat. 6,021,397).

None of these grounds of rejection can be sustained.

I.   There is no "Technological Arts" requirement, and the § 101 rejection is without merit

The examiner rejected the claims under § 101 on the grounds that:

For a claim to be statutory under 35 USC 101 the following two conditions must
be met:
1) In the claim, the practical application of an algorithm or idea results in a useful,
concrete, tangible result, AND
2) The claim provides a limitation in the technological arts that enables a useful,
concrete, tangible result.
(Office Action of July 3, 2006, page 2)

The "technological arts" test was repudiated by the Board of Patent Appeals and

Interferences in *Ex parte Lundgren*, Appeal No. 2003-2088 (Precedential BPAI opinion Sept.

2005), and the Interim Guidelines for Examination of Patent Applications for Patent Subject

Matter Eligibility plainly state "United States patent law does not support the application of a

'technological aspect' or 'technological arts' requirement." (1300 Off. Gaz. Pat. Office 142

(Nov. 22, 2005), (p. 42 of the PDF version available at

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf).)

The rejection is therefore improper.

Further, the claims clearly comply with the actual requirements set forth by the patent

office and the case law in interpreting § 101. The examiner stated that "The claims are not

directed to any one of the areas of patentable subject matter, such as product, process, process of

making or composition" (Office Action, page 2). To the contrary, all of the claims are plainly

directed to "a method" that happens to be carried out on a computer and manipulates data

provided by an unclaimed algorithm. As the Supreme Court held in *Diehr* and the Federal Circuit

summarized in *AT&T*, "even though a mathematical algorithm is not patentable in isolation, a

process that applies an equation to a new and useful end 'is at the very least not barred at the

threshold by § 101.'" *AT&T Corp. v. Excel Comm., Inc.*, 172 F.3d 1352, 1357 (Fed. Cir. 1999),

quoting *Diehr*, 450 U.S. 175, 188 (1981). The claimed subject matter clearly has a practical

utility (*see State Street*, 149 F.3d 1368, 1375 (Fed. Cir. 1998) and is patentable under § 101, as

demonstrated by a comparison to the claims at issue in *AT&T*.

The present claims include results that are clearly useful and are even *more* tangible than

those approved by the Federal Circuit in *AT&T*. Claim 1 in the Doherty patent involved in that

case recited a method having only two steps: "generating a message record ..." and "including, in said message record, a primary interexchange carrier having a value which is a function of [certain details]" (Doherty, claim 1). Claim 14 in this application also recites steps of "generating data" and has limitations as to the nature of the generated data ("each stripe including ..." and "a boundary of each stripe varying ..."). It goes on, however, to include "displaying the trend line and the stripes in the visualization system." As in *AT&T*, the generated "trend line" and "stripe" of claim 14 represent information about the performance measure. This performance measure and the data representing it are a set of specific values, not an abstract concept. They are clearly useful in understanding the data, for example, the trend line and stripes displayed in the visualization system allow an investor to see at a glance not only whether an investment is likely to increase or decrease, but how likely it is to do so for a range of potential values. From this, they are better able to make decisions whether to buy or sell assets. A displayed graph of such data is more tangible than the "message record" of claim 1 in Doherty.

The examiner also stated that "the claimed invention is not supported by either a concrete and tangible asserted utility or a well established utility." (Id.) The applicant understands the case law and guidelines to require a useful, concrete, or tangible result, not a "concrete and tangible asserted utility," a phrase with which the applicant is unfamiliar. The claims clearly have a useful, concrete, and tangible result and a practical utility, as pointed out above.

As to the § 112 rejection tied to the § 101 rejection, one skilled in the art, having read the applicant's disclosure, would plainly know how to use the claimed invention to generate and display a graph of the type claimed.

II.   The claims are fully enabled and are not missing any essential elements

The examiner rejected the claims under § 112, first and second paragraphs, for failure to comply with the enablement requirement and for omitting essential elements. In both cases, this is apparently because the claims do not include limitations on the "algorithm capable of producing predicted probability distributions." Section 2172.01 of the MPEP, cited by the examiner, states that "a claim which omits matter **disclosed to be essential** to the invention as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling" and "a claim which fails to interrelate essential elements of

the invention **as defined by applicant(s)** in the specification may be rejected under 35 U.S.C.
112, second paragraph, for failure to point out and distinctly claim the invention" (emphasis
added).

Nothing in the specification states that any particular algorithm for producing the
predicted probability distributions is essential or required, thus it is improper to read such a
limitation in to the claim and to require its explicit inclusion. The claims distinctly claim a
particular *use* of *any algorithm* that produces the data necessary to complete the steps actually
claimed. The specification identified one such algorithm by reference to a co-pending application
(see specification, p. 8, lines 11-13), thus the claims are fully enabled.

In particular, the examiner's statement that "In the absence of such a concrete algorithm
the ordinary practitioner would [not?] know what to do with the invention. Instead, the
practitioner would turn to one of the many computer graphic software guides to refresh himself
on the available display features and techniques used in the art" (OA, page 4) is incorrect. In the
absence of the algorithm, the ordinary practitioner would **not** turn to an alternative graphic
software guide, as that would not supply the needed information (predicted performance
measures) provided by the unclaimed algorithm. Rather, such a practitioner who was somehow
not equipped with any method for predicting performance measures could turn to any of a
variety of references to find such an algorithm. Having found a suitable algorithm, he could then
practice the claimed method and graph the data provided by his chosen algorithm.

III.   The examiner fails even to *allege* that all elements of the claims are disclosed by the prior
        art, and has thus failed to make out a prima facie case of obviousness

Among other unique elements, claim 14 includes "a boundary of each stripe varying as a
function of time according to variations in the odds of the performance measure being within the
range represented by the stripe." Not one reference cited by the examiner discloses this element,
as the examiner acknowledges on page 5 of the office action:

> *none* of Gatto, Jones, Makivic [U.S. Pat. 6,061,662], Official Notice, AAPA,
> Morningstar.com, ETrade [websites provided by the applicant] or Excel explicitly
> disclose the exact method for use in a visualization system comprising ... a
> boundary of each stripe varying as a function of time according to variations in

the odds of the performance measure being within the range represented by the
stripe.
(emphasis added; the examiner also lists every other element of each claim as *not*
disclosed in any of the cited references, AAPA, or Official Notice).

Despite providing a lengthy description of what the prior art *does* disclose, the
examiner's discussion of the art completely fails to point out or even allege the presence of "a
boundary of each stripe varying as a function of time according to variations in the odds of the
performance measure being within the range represented by the stripe" in any reference.

The examiner reaches his conclusion that "an ordinary practitioner of the art at the time
of Applicant's invention would have found it as obvious to have combined the disclosures" to
produce the claimed method (p. 7) without ever completing one of the most basic parts of a
prima facie case for obviousness, identifying each element in the prior art. Where the examiner
has utterly failed to show where multiple elements of a claim are described in the art, he can't
reasonably allege that the claim as a whole is obvious.

Further, the examiner's purported motivation to combine the references, "the desire to
provide users with improved tools for effectively viewing historical estimates, analytical
projections and recommendations regarding financial assets such as securities" (p. 7) is merely a
motivation to improve the art, something that always exists, not a motivation to make any
specific improvement in a way that produces the claimed method. With neither motivation nor
all elements disclosed, the examiner has failed to make out a prima facie case of obviousness.
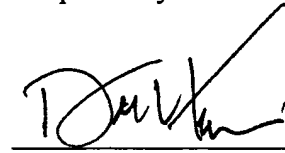

Enclosed is a $250 check for the notice of appeal fee. Please apply any other charges or
credits to deposit account 06-1050.

Respectfully submitted,

Date: _____3/28/6_____

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